

SIDLEY AUSTIN BROWN & WOOD LLP

CHICAGO
DALLAS
LOS ANGELES
NEW YORK
SAN FRANCISCO

1501 K STREET, N.W.
WASHINGTON, D.C. 20005
TELEPHONE 202 736 8000
FACSIMILE 202 736 8711
www.sidley.com
FOUNDED 1866

BEIJING
GENEVA
HONG KONG
LONDON
SHANGHAI
SINGAPORE
TOKYO

WRITER'S DIRECT NUMBER
(202) 736-8250

WRITER'S E-MAIL ADDRESS
ageolot@sidley.com

May 30, 2002

By Electronic Delivery

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TWB-204
Washington, D.C. 20554

Re: Application by Verizon New England Inc., etc. for Authorization to
Provide In-Region, InterLATA Services in Maine, CC Docket No. 02-61

Dear Ms. Dortch:

This letter responds to arguments raised by Verizon's May 3 reply comments and by a letter dated May 15, 2002 from Trina M. Bragdon, Esq., a Maine PUC staff attorney.¹

AT&T has demonstrated that switching costs are largely fixed and that the Maine PUC therefore committed clear error in relying on a default 30% fixed/70% usage sensitive ratio contrary to TELRIC cost causation principles. (AT&T Comm. at 7-14; AT&T Rep. at 5-7.) Verizon's claim in its Reply Comments (at 10-12) that the "getting started" costs of modern digital switches are predominantly usage sensitive ignores both well-established cost causation principles and Verizon's own admissions in recent UNE rate proceedings that "getting started" costs are fixed and do not vary with changes in volume.

AT&T's initial sponsorship of a Hatfield Model before the Maine PUC including a default 30% fixed/70% usage sensitive ratio, which is the subject of Ms. Bragdon's letter, fails to justify the Maine PUC's ultimate adoption of UNE rates based on a predominately usage sensitive allocation of switching costs. That early Hatfield Model was developed prior to the availability of a large body of switching cost data conclusively demonstrating that switching costs are predominantly fixed. AT&T subsequently withdrew that Hatfield Model when the Maine PUC revived the state UNE proceeding in 2000 after a three-year interval. AT&T

¹ Letter from Trina M. Bragdon, Maine PUC Staff Attorney, to William F. Canton (May 15, 2002).

Marlene H. Dortch
May 30, 2002
Page 2

thereafter made its case for TELRIC-compliant rates before the Maine PUC by highlighting the TELRIC errors contained in Verizon's various models, including Verizon's SCIS switching model and its predominately usage sensitive allocation of switching costs -- the very same TELRIC error that AT&T highlights here.

These points are described in more detail below and in the attached Supplemental Declaration of Catherine E. Pitts (May 29, 2002) ("Pitts Supp. Decl.").

Switch Rate Design. AT&T has shown that the Maine PUC committed clear error in failing to follow TELRIC and cost causation principles by using the default 30% fixed/70% usage sensitive ratio in allocating switching costs. (AT&T Comm. at 7-14; AT&T Rep. at 5-7.) TELRIC requires UNE rates to be established on a "cost causative basis" and to "recover costs in the manner that reflects the way they were incurred."² Cost causation principles require that non-usage-sensitive switching costs be assigned to the flat-rated or fixed line port charge and that usage-sensitive switching costs be allocated to the minute-of-use rate element.³

Because the majority of switching costs do not vary with volume, they should be allocated to the fixed line port charge -- contrary to the allocation adopted by the Maine PUC. (AT&T Comm. at 7-10.) AT&T has shown that much of the total cost of a switch is associated with the memory, processors, administrative and maintenance equipment and is incurred at the time a switch is placed in operation. These "getting started" costs do not vary with usage and should be assigned to the fixed line port rate element. If a switch does exhaust because the maximum port capacity is reached, then a wire center must incur the cost of a second switch. The exhaustion of the first switch's ports is the primary cause for incurring the "getting started" costs for the second switch, and these costs should also be assigned to the fixed port rate element. (AT&T Comm. at 10; Pitts Decl. at ¶ 10.)

Verizon's response in its Reply Comments (at 11-12) that "getting started" costs, and even switching costs in general, are largely usage sensitive contradicts its own statements to the contrary in recent UNE ratemaking proceedings. Specifically, Verizon last year stated before the Maryland PUC that "[g]etting started costs represent the investments associated with the

² *Id.* ¶¶ 691, 743.

³ *Id.* ¶¶ 744-46. *See also id.* ¶ 744 (the adoption of usage-sensitive charges where flat-rate charges were required "would give purchasers of access to network elements an uneconomic incentive to reduce their traffic volumes.").

Marlene H. Dortch
May 30, 2002
Page 3

switch processor and memory, and *are considered fixed costs and do not vary with additional traffic offered to a switch.*"⁴

Similarly, a Telcordia representative responsible for the SCIS model used by Verizon to model switch costs testified in the same state proceeding that "getting started" costs are *not* usage sensitive: "SCIS determines a 'getting started' investment for each switching system. This investment models the investment for processor-related equipment and other equipment *independent of switch size (i.e., lines and trunks) and traffic.*"⁵

To support its claim that the modern digital switch is largely usage sensitive, Verizon relies (Ver. Rep. at 11) upon a fourteen year-old Commission order that fails to reflect the significant changes in digital switching that have occurred since its issuance in 1988. Because the growth in microcomputers and the decline in processing cost increased dramatically the processing power of modern digital switches, switch utilization of the central processor as a percentage of capacity is now very small, and usage could increase multiple times before a switch processor exhausted on capacity. (Pitts Decl. ¶ 9). Consequently, modern digital switches have a large amount of unused capacity, and changes in usage no longer cause a corresponding change in costs.

Verizon's claim that "getting started" costs are properly treated as usage-sensitive because they are "based entirely on the anticipated usage of th[e] switch," (Ver. Rep. at 12; Dinan/Garzillo/Anglin Rep. Dec. ¶ 9), ignores the elementary cost causation principles discussed above. Under Verizon's view, *all* equipment must be treated as traffic sensitive simply because engineers consider "use" in sizing the equipment.⁶ However, as the Administrative Law Judge

⁴ Verizon Response to AT&T Data Request 11-39, *In The Matter of the Investigation into Rates for Unbundled Network Elements Pursuant to the Telecommunications Act of 1996*, Case No. 8879 (Md. PSC) (served July 19, 2001) ("*Maryland UNE Proceeding*") (emphasis supplied). Verizon made the same concession that "getting started" costs are fixed and do not vary with usage in the recent Massachusetts UNE proceeding. Tr. 1614, 1616, *Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts*, Docket No. 01-20 (Mass. DTE) (Jan. 24, 2002) (Verizon witness Nancy Matt).

⁵ Surrebuttal Dec. of David Garfield, *Maryland UNE Proceeding*, ¶ 6 (emphasis supplied).

⁶ In the recent Virginia UNE proceeding pending before the Commission, Verizon witness Joseph Gansert conceded that Verizon designs its switches so that they will not exhaust as a result of processing capacity:

[T]here is no question that in ordering the switch, it's designed so it will be, in effect, port-limited, so [what] will trigger you to do additions is

Marlene H. Dortch
May 30, 2002
Page 4

recently found in the Pennsylvania UNE rate proceeding, this "switch sizing" argument does not show that "getting started" costs are usage-sensitive:

Although a switch may be sized according to expected load, whatever costs are associated with that switch's size are absorbed once when the switch is placed. Verizon has presented no credible evidence that it will then experience call duration related costs associated with the processor and memory.⁷

Instead, proper cost causation principles consider *whether a change in usage leads to a change in Verizon's costs*. This analysis shows that additional calls largely will not cause Verizon to incur additional processor costs and that switching costs accordingly are mostly non-usage-sensitive and should be assigned to the fixed line port rate element.

Verizon also totally misconstrues AT&T's argument in claiming that AT&T believes the timing of cost incurrence is somehow relevant to cost causation (Ver. Rep. at 12; Dinan/Garzillo/Anglin Rep. Dec. at ¶ 10). It is not *when* the costs are incurred that is at issue, but *whether these switching costs vary with changes in usage* -- which they largely do not, as Verizon's own prior admissions concerning "getting started" costs make clear.

ports. But that doesn't imply you don't have to have processing resources. It only says that that's the way you design it.

Secondly, the evidence of that is it's true that if you exceeded the [processor] limit, you would have to put in more switches, and over recent years we haven't been doing that. The reason why is because the vendors have been increasing the capacity of their switches.

...

our assumption at the current time would be that for most of our switches the central processor is not going to exhaust.

Tr. 5449, 5457, *In the Matter of Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitration*, CC Docket No. 00-218 et al., (FCC) (Nov. 28, 2001).

⁷ *Generic Investigation Re Verizon Pennsylvania Inc.'s Unbundled Network Element Rates*, Doc. No. R-00016683, at 55 (Recommended Decision) (May 3, 2002) (ALJ Schnierle) ("Pa. Recommended Decision"). The ALJ also rejected another argument made here by Verizon, namely that Verizon's experience with one or two switches reaching "near exhaust" supported Verizon's claim that switch capacity is constrained by call capacity. Dinan/Garzillo/Anglin Rep. Dec. ¶ 9. In ALJ Schiernle's view, "the processor exhaust of one switch out of hundreds operated by Verizon is no more than the exception proves the rule." *Pa. Recommended Decision* at 55.

Marlene H. Dortch
May 30, 2002
Page 5

AT&T's prior Hatfield Model. The Maine staff attorney letter does not contest the merits of AT&T's argument that switching costs are predominately fixed. Instead, Ms. Bragdon argues that because AT&T previously sponsored a Hatfield Model using a 30% fixed/70% usage sensitive ratio for switching costs, AT&T cannot now contend that the Maine PUC committed clear error in adopting such an allocation in February 2002. AT&T respectfully disagrees.

When the Maine PUC first initiated its UNE rate proceeding in 1997, AT&T submitted an early version of the Hatfield Model using a 30% fixed/70% usage sensitive switching cost ratio developed in the mid-1990's for the FCC's Universal Service Fund proceeding. That ratio was based on the allocation of costs to port and non-port categories, with the fixed line port narrowly defined to include only line card costs and the costs of main distributing frame termination. These narrowly defined port costs were 30% of total switching costs and were recovered through fixed charges. The remaining 70% of switching costs were non-port charges recovered through usage sensitive minute-of-use charges. (Pitts Supp. Decl. ¶ 4.)

These allocations were based on very limited information. In addressing the allocation of switching costs in the USF proceeding, the Commission found there was very little publicly available data on this issue. The Commission explicitly noted the "difficulty in obtaining information on switching costs and the proportion of switching costs to be included in the port function."⁸ Without such data, it was impossible to analyze switching costs on a cost causative basis. (*Id.*)

In the USF proceeding, the issue of the relative allocation of switching costs to fixed port and minute-of-use charges also received less attention than other issues. For USF purposes, the Commission was seeking to determine a cost per line to assist carriers serving high-cost areas, and did not develop specific rates for switching or other unbundled elements.⁹ The Commission based these costs on a model that estimated the forward-looking cost of constructing and operating a network used to provide the services supported by the USF mechanism and observed:

In our evaluation of the switching modules in this proceeding, we note that, *for universal service purposes, switching costs are less significant than they would be in, for example, a cost model to*

⁸ *In the Matter of the Federal-State Board on Universal Service*, CC Docket No. 96-45, 97-160, Further Notice of Proposed Rulemaking, 12 FCC Rcd 18514, ¶ 136 (1997).

⁹ *In the Matter of the Federal-State Board on Universal Service*, CC Docket No. 96-45, 97-160, 14 FCC Rcd 20156 (1999) ("Tenth Report and Order").

Marlene H. Dortch
May 30, 2002
Page 6

*determine unbundled network element switching and transport costs.*¹⁰

The Hatfield Model originally developed for the USF proceeding was also used in UNE rate proceedings after the passage of the Telecommunications Act. Accordingly, AT&T submitted the Hatfield Model including the default 30% fixed/70% usage sensitive ratio in the initial stage of the Maine UNE proceeding in 1997. (Pitts Supp. Decl. ¶ 4.)

Since then, it has become clear that a 30% fixed/70% usage sensitive allocation of switching costs does not reflect cost causation principles. State UNE ratemaking proceedings have now made available a large body of switching cost data demonstrating that the narrow definition of fixed line port costs underlying the original 30% fixed cost allocation failed to take account of "getting started" costs that do not vary with volume. Additionally, analysis of the switching cost data using cost causation principles has similarly demonstrated that various switching cost categories (e.g., line termination and EPHC costs¹¹) exhaust on port capacity rather than call capacity and therefore should be allocated to the fixed line port rate element. (*Id.* at ¶ 5.)

A further important factor affecting allocation of switching costs has been recognition of the impact of the significant growth in switch processing capacity. This growth in processing capacity and the decline in processing costs have made possible digital switches that do not exhaust on usage. The 30% fixed/70% usage sensitive ratio fails to take into account the growth in the switch processing capacity and the large relative percentage of fixed costs. (*Id.* at ¶ 6.)

This growing body of evidence that switching costs are largely fixed has been recognized in state ratemaking proceedings. A February 1998 order by the Illinois Commerce Commission found that Ameritech's proposed switching usage charges were overstated and ordered largely fixed switching rates.¹² Similarly, the Administrative Law Judge in New York, relying on Verizon's own data, determined in a March 2001 decision that switching costs were

¹⁰ *In the Matter of the Federal-State Board on Universal Service*, CC Docket No. 96-45, 97-160, 13 FCC Rcd 21323, 21355 (1998) ("*Fifth Report and Order*") (emphasis supplied).

¹¹ EPHC is an output cost category for Lucent 5ESS switches that captures the common equipment in the switch module, which is the primary building block component of the 5ESS switch's distributed architecture. This common equipment's maximum port capacity is always reached before its call processing capacity.

¹² *Investigation into Forward Looking Cost Studies and Rates of Ameritech Illinois for Interconnection, Network Elements, Transport, Termination of Traffic*, Docket No. 96-0486 & 96-0569 (con.), 1998 Ill. PUC LEXIS 109 (Ill. Commerce Commission) (Feb. 17, 1998).

Marlene H. Dortch
May 30, 2002
Page 7

predominantly fixed and that no more than 40% of switching costs were usage sensitive.¹³ The New York Public Service Commission affirmed that ruling and further reduced the usage sensitive percentage from 40% to 34%.¹⁴

As this evidence that switching costs are largely fixed has become available over the years, AT&T has presented that evidence in state proceedings and no longer supports the 30% fixed/70% usage sensitive ratio. For example, AT&T has supported the allocation of the majority of switching costs to the fixed line port rate element in state UNE proceedings in the Verizon states of Virginia, Maryland, and Pennsylvania. (Pitts Supp. Decl. ¶ 7.) Similarly, the developers of the Hatfield Model (now known as the HAI Model) have revised their model to change the port and non-port switch cost categories to refer instead to "non-usage" (i.e., fixed) and usage categories. Version 5.2a of the HAI Model now specifies a 60% non-usage (fixed)/40% usage sensitive ratio, and AT&T sponsored that version of the model in August 2001 in the California UNE ratemaking proceeding (Docket Nos. A01-02-024 and A01-02-35). (*Id.* at ¶ 8.)

The history of the Maine UNE ratemaking proceeding reflects these developments. Although AT&T sponsored the earlier Hatfield Model at the beginning of the proceeding in 1997, the case then lay dormant for a three-year period while the Maine PUC waited for decisions by this Commission. When the proceedings resumed at the end of that three year period, AT&T withdrew the Hatfield Model and thereafter based its advocacy of TELRIC switching rates on the errors contained in the SCIS model submitted by Verizon -- including the predominately usage sensitive allocation of switching costs, which is the clear TELRIC error AT&T highlights here. (*See* AT&T Rep. at 5 & Att. 1 (attaching portion of AT&T brief in Maine UNE ratemaking proceeding arguing for allocation of "getting started" costs to the fixed port rate element).)

Therefore, AT&T's use of the default provisions of the earlier Hatfield Model at an earlier stage of the Maine PUC proceeding provides no justification for the clearly erroneous decision by the Maine PUC in February 2002 to establish UNE rates using the default USF 30%

¹³ *Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements*, Case No. 98-C-1357, Recommended Decision on Module 3 Issues by ALJ Joel A. Linsider, May 16, 2001.

¹⁴ *Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements*, Case No. 98-C-1357, Order on Unbundled Network Element Rates, (NYPSC), January 28, 2002.

Marlene H. Dortch

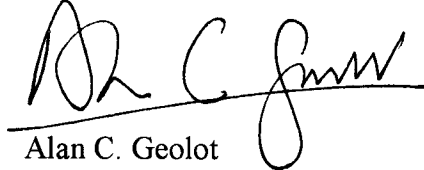
May 30, 2002

Page 8

fixed/70% usage sensitive ratio, which has now been shown to be inconsistent with TELRIC and cost causation principles.

AT&T would be pleased to provide further information on these issues.

Respectfully submitted,



Alan C. Geolot

Att.

C. Newcomb

W. Dever

G. Remondino

A. Berkowitz

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

Application by Verizon New England)	
Inc., Bell Atlantic Communications,)	
Inc. (d/b/a Verizon Long Distance),)	CC Docket No. 02- 61
NYNEX Long Distance Company)	
(d/b/a Verizon Enterprise Solutions),)	
Verizon Global Networks Inc., and)	
Verizon Select Services Inc., for)	
Authorization To Provide In-Region,)	
InterLATA Services in Maine)	
)	

**SUPPLEMENTAL DECLARATION OF CATHERINE E. PITTS
ON BEHALF OF AT&T CORP.**

1. I am the same Catherine E. Pitts who previously submitted a declaration dated April 10, 2002 on behalf of AT&T Corp. in this proceeding.
2. This Supplemental Declaration responds to a May 15, 2002 letter by Maine PUC staff attorney Tina Bragdon, which notes that AT&T formerly sponsored a version of the Hatfield Model including as a default the 30% fixed/70% usage sensitive ratio.¹
3. As described below, the earlier version of the Hatfield Model to which Ms. Bragdon refers was developed for the FCC's Universal Service Fund proceeding at a time when very little switching cost data were publicly available. Since then, a large body of data has become available showing that switching costs are

¹ References to "usage sensitive" costs in this declaration refer to peak period costs.

predominately fixed. Accordingly, the Hatfield Model (now known as the HAI Model) has been revised to reflect this evidence, and AT&T has advocated the allocation of a majority of switching costs to the fixed line port rate element in various state UNE ratemaking proceedings.

4. At the commencement of the Maine UNE ratemaking proceeding in 1997, AT&T submitted an early version of the Hatfield Model that was developed during the FCC's Universal Service Fund proceeding in the mid-1990's. This version of the Hatfield Model used a 30% fixed/70% usage sensitive allocation of switching costs. This ratio was based on the allocation of switching costs between port and non-port categories, with the fixed line port narrowly defined to include only line card costs and the costs of main distributing frame termination. These fixed port costs were 30% of total switching costs, and the remaining 70% of switching costs were allocated to the non-port category and recovered through usage sensitive minute-of-use rates. At the time, there was little publicly available switching cost data, a point noted by the FCC during the USF proceeding.² Without such data, it was impossible to analyze switching costs on a cost causative basis.
5. Since then, a large body of switching cost data has become available from state UNE ratemaking proceedings demonstrating that the 30% fixed/70% usage sensitive ratio fails to reflect cost causation principles. These data show that the narrow definition of fixed line port costs used to support the original 30% fixed/70% usage sensitive ratio ignores the "getting started" costs that do not vary

² *In the Matter of the Federal-State Board on Universal Service*, CC Docket No. 96-45, 97-160, Further Notice of Proposed Rulemaking, 12 FCC Rcd 18514, ¶ 136 (1997).

with volume. In addition, application of these cost causation principles has shown that various switching cost categories (e.g., line termination and EPHC costs³) exhaust on port capacity rather than call capacity and therefore should be allocated to the fixed line port rate element.

6. The significant growth in switch processing capacity is another factor affecting the allocation of switching costs. As I discussed in my original declaration (at ¶¶ 9-10), this growth in processing capacity and the decline in processing costs have made possible digital switches that will not exhaust on usage. The default 30% fixed/70% usage sensitive ratio did not consider the growth in the switch processing capacity and the large relative percentage of fixed costs.
7. As evidence that switching costs are largely fixed has become available over the years, AT&T has presented that evidence in state proceedings. I have recently been involved in various state UNE proceedings in the Verizon states of Virginia, Maryland, and Pennsylvania in which AT&T has urged the allocation of a majority of switching costs to the fixed line port rate element based on state-specific data and cost causation principles.
8. Similarly, the developers of the Hatfield Model have revised their model to change the port and non-port classifications to non-usage (i.e., fixed) and usage categories. Version 5.2a of the HAI Model specifies a 60% non-usage (fixed)/40% usage sensitive ratio, and AT&T sponsored that version of the HAI

³ EPHC is an output cost category for Lucent 5ESS switches that captures the common equipment in the switch module, which is the primary building block component of the 5ESS switch's distributed architecture. This common equipment's maximum port capacity is always reached before its call processing capacity.

Model in August 2001 in the California UNE ratemaking proceeding (Docket
Nos. A01-02-024 and A01-02-35).

The foregoing is true and correct to the best of my information and belief.

/s/ Catherine E. Pitts
Catherine E. Pitts

Dated: May 30, 2002